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09/943,904	08/30/2001	Vincent J. Zimmer	42390P11190	2083

7590 03/20/2007	EXAMINER
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP Seventh Floor 12400 Wilshire Boulevard Los Angeles, CA 90025-1026	MANOSKEY, JOSEPH D

ART UNIT	PAPER NUMBER
2113	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

	Application No.	Applicant(s)
Office Action Summary	09/943,904	ZIMMER ET AL.
	Examiner	Art Unit	
	Joseph D. Manoskey	2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 December 2006*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-27_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-27_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 August 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2.   Claims 19-27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are directed towards and "an apparatus" composed of "a BIOS firmware component" and "an update firmware component containing a firmware update utility". This is a program per se and is non-statutory subject matter.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Christeson et al., U.S. Patent 5,579,522, hereinafter referred to as "Christeson", in view of Wu et al., U.S. Patent 6,732,267, hereinafter referred to as "Wu".

5.   Referring to claim 1, Christeson teaches a method of dynamically updating BIOS

firmware parts that includes both normal BIOS and recovery BIOS and using an

additional BIOS region to extend the system BIOS memory area, this is interpreted as

adding a new initiation module to a BIOS firmware of a computing system, the BIOS

firmware having a plurality of initiation modules including recovery initiation modules for

recovery of the computing system and non-recovery modules (See Col. 1, lines 25-45

and Col. 2, lines 15-57).

        Christeson also discloses storing BIOS instructions in the flash memory. The

BIOS includes both a normal BIOS in one memory block and recovery BIOS in another

area of the flash memory, or the "designated" recovery area of the flash memory.

Christeson teaches updating the BIOS including the recovery portion. Christeson also

teaches dynamic updating the BIOS including separately updating the recovery BIOS.

By placing an update in the recovery BIOS, the dynamic update is determined, or

"automatically evaluated", to be a recovery module and is thus designated as such. A

non-recovery module would not be placed in the recovery BIOS and thus would not be

designated as a recovery module. This is interpreted as automatically evaluating the

new initiation module and designating the new initiation module as a recovery initiation

module if the new initiation is required for the recovery of the computing system (See

Col. 2, lines 41-57).

        Christeson does not teach the computer system having an extensible firmware

architecture, however Christeson does teach about updating the BIOS, rebooting in the

process, and allowing for the BIOS region to be extended (See Col. 2, lines 41-57 and

Col. 12, lines 50-57). Wu teaches updating a system BIOS which includes a Extensible

Firmware Interface (See Col. 3, lines 45-52). It would have been obvious to one of

ordinary skill in the art at the time of the invention to combine the BIOS update of

Christeson with the EFI of Wu. This would have been obvious to one of ordinary skill in

the art at the time of the invention to do because the EFI is dedicated to the booting

environment and supporting BIOS updating (See Wu, Col. 3, lines 45-52).

6.   Referring to claim 2, Christeson and Wu disclose all the limitations (See rejection

of claim 1) including have a block containing all the recovery BIOS, and all parts of the

BIOS in the recovery block are part of the recovery BIOS, this is interpreted as

designating the new initiation module as a recovery initiation module if another recovery

initiation depends upon the new initiation module (See Christeson, Col. 2, lines 52-57).

7.   Referring to claim 3, Christeson and Wu teach all the limitations (See rejection of

claim 2) including a recovery mode that executes the recovery BIOS, this is interpreted

as executing only recovery initiation modules in an event of a recovery restart (See

Christeson Col. 3, lines 16-25).

8.   Referring to claim 4, Christeson and Wu disclose all the limitations (See rejection

of claim 2) including updating the BIOS, this interpreted as an updated recovery

initiation module added to the BIOS firmware to replace an outdated recovery initiation

module (See Christeson, Col. 2, lines 15-20).

9.   Referring to claim 5, Christeson and Wu teach all the limitations (See rejection of

claim 3) including the verification of the flash memory area, this is interpreted as

automatically evaluating at least one of the recovery initiation modules (See Christeson,

Col. 3, lines 26-35). Christeson discloses updating the BIOS including recovery BIOS,

this interpreted as removing the recovery initiation module designation from at least one

of the recovery initiation modules if the designation is solely due to dependence thereon

by the outdated recovery initiation module (See Col. 2, lines 15-20 and lines 52-57).

10.   Referring to claim 6, Christeson and Wu teach all the limitations (See rejection of

claim 1) including locking the recovery BIOS, this is interpreted as wherein the recovery

initiation modules are rendered unalterable (See Christeson, Col. 2, lines 52-54).

11.   Referring to claim 7, Christeson and Wu disclose all the limitations (See rejection

of claim 6) including the recovery BIOS being located in non-volatile memory, this is

interpreted as the initiation module reside in a fault-tolerant firmware block (See

Christeson, Col. 2, lines 15-20).

12.   Referring to claim 8, Christeson and Wu teach all the limitations (See rejection of

claim 7) including a block of code reference numbers "202", "203", "204" and "205" that

add up to 64KB and contains the recovery BIOS, this is interpreted as the recovery

initiation modules contained in a 64 kilobyte block of code (See Christeson, Fig. 2).

13.   Referring to claim 9, Christeson and Wu teach all the limitations (See rejection of

claim 1) including discloses the recovery being used because of a corruption from

power failure or other reasons, this is interpreted as recovery of the computing system

is necessitated by an event selected from the group consisting of power failure,

hardware failure, and security error (See Christeson, Col. 3, lines 1-4).

14.   Referring to claim 10, Christeson teaches a computer readable medium

containing instructions when executed on processor performs a method of dynamically

updating BIOS firmware parts that includes both normal BIOS and recovery BIOS and

using an additional BIOS region to extend the system BIOS memory area, this is

interpreted as adding a new initiation module to a BIOS firmware of a computing

system, the BIOS firmware having a plurality of initiation modules including recovery

initiation modules for recovery of the computing system and non-recovery modules (See

Col. 1, lines 25-45 and Col. 2, lines 15-57).

Christeson also discloses storing BIOS instructions in the flash memory. The

BIOS includes both a normal BIOS in one memory block and recovery BIOS in another

area of the flash memory, or the "designated" recovery area of the flash memory.

Christeson teaches updating the BIOS including the recovery portion. Christeson also

teaches dynamic updating the BIOS including separately updating the recovery BIOS.

By placing an update in the recovery BIOS, the dynamic update is determined, or "automatically evaluated", to be a recovery module and is thus designated as such. A non-recovery module would not be placed in the recovery BIOS and thus would not be designated as a recovery module. This is interpreted as automatically evaluating the new initiation module and designating the new initiation module as a recovery initiation module if the new initiation is required for the recovery of the computing system (See Col. 2, lines 41-57).

Christeson does not teach the computer system having an extensible firmware architecture, however Christeson does teach about updating the BIOS, rebooting in the process, and allowing for the BIOS region to be extended (See Col. 2, lines 41-57 and Col. 12, lines 50-57). Wu teaches updating a system BIOS which includes a Extensible Firmware Interface (See Col. 3, lines 45-52). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the BIOS update of Christeson with the EFI of Wu. This would have been obvious to one of ordinary skill in the art at the time of the invention to do because the EFI is dedicated to the booting environment and supporting BIOS updating (See Wu, Col. 3, lines 45-52).

15. Referring to claim 11, Christeson and Wu disclose all the limitations (See rejection of claim 10) including have a block containing all the recovery BIOS, and all parts of the BIOS in the recovery block are part of the recovery BIOS, this is interpreted as designating the new initiation module as a recovery initiation module if another

recovery initiation module depends upon the new initiation module (See Christeson,

Col. 2, lines 52-57).

16.   Referring to claim 12, Christeson and Wu teach all the limitations (See rejection

of claim 10) including a recovery mode that executes the recovery BIOS, this is

interpreted as executing only recovery initiation modules in an event of a recovery

restart (See Christeson, Col. 3, lines 16-25).

17.   Referring to claim 13, Christeson and Wu disclose all the limitations (See

rejection of claim 11) including updating the BIOS, this interpreted as an updated

recovery initiation module added to the BIOS firmware to replace an outdated recovery

initiation module (See Christeson, Col. 2, lines 15-20).

18.   Referring to claim 14, Christeson and Wu teach all the limitations (See rejection

of claim 13) including the verification of the flash memory area, this is interpreted as

automatically evaluating at least one of the recovery initiation modules (See Christeson,

Col. 3, lines 26-35). Christeson discloses updating the BIOS including recovery BIOS,

this interpreted as removing recovery initiation module designation from a least one of

the recovery initiation modules if the designation is solely due to dependence thereon

by the outdated recovery initiation module (See Col. 2, lines 15-20 and lines 52-57).

19.   Referring to claim 15, Christeson and Wu teach all the limitations (See rejection

of claim 10) including locking the recovery BIOS, this is interpreted as wherein the

recovery initiation modules are rendered unalterable (See Christeson, Col. 2, lines 52-

54).

20.   Referring to claim 16, Christeson and Wu disclose all the limitations (See

rejection of claim 15) including the recovery BIOS being located in non-volatile memory,

this is interpreted as the initiation module reside in a fault-tolerant firmware block (See

Christeson, Col. 2, lines 15-20).

21.   Referring to claim 17, Christeson and Wu teach all the limitations (See rejection

of claim 16) including a block of code reference numbers "202", "203", "204" and "205"

that add up to 64KB and contains the recovery BIOS, this is interpreted as the recovery

initiation modules contained in a 64 kilobyte block of code (See Christeson, Fig. 2).

22.   Referring to claim 18, Christeson and Wu disclose all the limitations (See

rejection of claim 10) including the recovery being used because of a corruption from

power failure or other reasons, this is interpreted as the recovery of the computing

system is necessitated by an event selected from the group consisting of power failure,

hardware failure, and security error (See Christeson, Col. 3, lines 1-4).

23.   Referring to claim 19, Christeson teaches a apparatus for dynamically updating

BIOS firmware parts that includes both normal BIOS and recovery BIOS and using an

additional BIOS region to extend the system BIOS memory area, this is interpreted as

adding an initiation module to a BIOS firmware of a computing system, the BIOS

firmware having a plurality of initiation modules including recovery initiation modules for

recovering of the computing system and non-recovery modules (See Col. 1, lines 25-45

and Col. 2, lines 15-57).

Christeson also discloses storing BIOS instructions in the flash memory. The

BIOS includes both a normal BIOS in one memory block and recovery BIOS in another

area of the flash memory, or the "designated" recovery area of the flash memory.

Christeson teaches updating the BIOS including the recovery portion. Christeson also

teaches dynamic updating the BIOS including separately updating the recovery BIOS.

By placing an update in the recovery BIOS, the dynamic update is determined, or

"automatically evaluated", to be a recovery module and is thus designated as such. A

non-recovery module would not be placed in the recovery BIOS and thus would not be

designated as a recovery module. This is interpreted as automatically evaluating the

new initiation module and designating the new initiation module as a recovery initiation

module if the new initiation is required for the recovery of the computing system (See

Col. 2, lines 41-57).

Christeson does not teach the computer system having an extensible firmware

architecture, however Christeson does teach about updating the BIOS, rebooting in the

process, and allowing for the BIOS region to be extended (See Col. 2, lines 41-57 and

Col. 12, lines 50-57). Wu teaches updating a system BIOS which includes a Extensible

Firmware Interface (See Col. 3, lines 45-52). It would have been obvious to one of

ordinary skill in the art at the time of the invention to combine the BIOS update of

Christeson with the EFI of Wu. This would have been obvious to one of ordinary skill in

the art at the time of the invention to do because the EFI is dedicated to the booting

environment and supporting BIOS updating (See Wu, Col. 3, lines 45-52).

24.   Referring to claim 20, Christeson and Wu disclose all the limitations (See

rejection of claim 19) including have a block containing all the recovery BIOS, and all

parts of the BIOS in the recovery block are part of the recovery BIOS, this is interpreted

as designating the initiation module as a recovery initiation module if another recovery

initiation module depends upon the new initiation module (See Christeson, Col. 2, lines

52-57).

25.   Referring to claim 21, Christeson and Wu teach all the limitations (See rejection

of claim 20) including a recovery mode that executes the recovery BIOS, this is

interpreted as executing only recovery initiation modules in an event of a recovery

restart (See Christeson, Col. 3, lines 16-25).

26.   Referring to claim 22, Christeson and Wu disclose all the limitations (See

rejection of claim 20) including updating the BIOS, this interpreted as an updated

recovery initiation module added to the BIOS firmware to replace an outdated recovery initiation module (See Christeson, Col. 2, lines 15-20).

27.   Referring to claim 23, Christeson and Wu teach all the limitations (See rejection of claim 21) including the verification of the flash memory area, this is interpreted as automatically evaluating at least one of the recovery initiation modules (See Christeson, Col. 3, lines 26-35). Christeson discloses updating the BIOS including recovery BIOS, this interpreted as removing the recovery initiation module designation from all initiation modules designated as recovery initiation modules solely due to dependence thereon by the outdated recovery initiation module (See Col. 2, lines 15-20 and lines 52-57).

28.   Referring to claim 24, Christeson and Wu teach all the limitations (See rejection of claim 19) including locking the recovery BIOS, this is interpreted as wherein the recovery initiation modules are rendered unalterable (See Christeson, Col. 2, lines 52-54).

29.   Referring to claim 25, Christeson and Wu disclose all the limitations (See rejection of claim 24) including the recovery BIOS being located in non-volatile memory, this is interpreted as the initiation module reside in a fault-tolerant firmware block (See Christeson, Col. 2, lines 15-20).

30.   Referring to claim 26, Christeson and Wu teach all the limitations (See rejection

of claim 25) including a block of code reference numbers "202", "203", "204" and "205"

that add up to 64KB and contains the recovery BIOS, this is interpreted as the recovery

initiation modules contained in a 64 kilobyte block of code (See Christeson, Fig. 2).

31.   Referring to claim 27, Christeson and Wu disclose all the limitations (See

rejection of claim 19) including the recovery being used because of a corruption from

power failure or other reasons, this is interpreted as the recovery of the computing

system is necessitated by an event selected from the group consisting of power failure,

hardware failure, and security error (See Christeson, Col. 3, lines 1-4).

Response to Arguments

32.   Applicant's arguments filed 28 December 2006 have been fully considered but

they are not persuasive.

33.   Concerning the 35 U.S.C. 101 rejection of claims 19-27, the claims are directed

towards and "an apparatus" composed of "a BIOS firmware component" and "an update

firmware component containing a firmware update utility". This is a program per se and

is non-statutory subject matter. The Examiner suggests including a limitation such as "a

ROM" and where the "BIOS firmware component" and "update firmware component

containing a firmware update utility." are stored on the ROM.

34.   Concerning the 35 U.S.C. 103(a) rejection of claims 1-27. The Applicant argues

that Christeson and Wu does not teach having recovery and non-recovery modules or

initialization modules. Also that Christeson does not teach the modules being new

modules and not just a subset of the old BIOS. The Examiner respectfully disagrees.

Christeson teaches the flash memory area having blocks or "modules" and one of them

being for recovery BIOS, thus having recovery and non-recovery modules (See Col. 2,

lines 41-57). BIOS is used for booting a computer and thus are used for initialization,

making the modules "initialization modules". Christeson also teaches additional BIOS

region can be used to extend the system BIOS memory area, thus new and not just

subset of old BIOS can be added (See Col. 2, lines 41-57).

The Applicant also argues that Christeson only teaches a fixed address range

and a fixed size. The Examiner respectfully disagrees. Christeson also teaches

additional BIOS region can be used to extend the system BIOS memory area, thus not

being fixed(See Col. 2, lines 41-57).

The Applicant argues that Christeson does not teach evaluation and designating

automatically the recovery modules. The Examiner respectfully disagrees. Christeson

teaches dynamic updating the BIOS including separately updating the recovery BIOS

(See Col. 2, lines 41-57). By placing an update in the recovery BIOS, the dynamic

update is determined, or "automatically evaluated", to be a recovery module and is thus

designated as such. A non-recovery module would not be placed in the recovery BIOS

and thus would not be designated as a recovery module.

The Applicant argues that Christeson and Wu have no motivation for combining. The Examiner respectfully disagrees. Christeson does not teach the computer system having an extensible firmware architecture, however Christeson does teach about updating the BIOS, rebooting in the process, and allowing for the BIOS region to be extended (See Col. 2, lines 41-57 and Col. 12, lines 50-57). Wu teaches updating a system BIOS which includes a Extensible Firmware Interface (See Col. 3, lines 45-52). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the BIOS update of Christeson with the EFI of Wu. This would have been obvious to one of ordinary skill in the art at the time of the invention to do because the EFI is dedicated to the booting environment and supporting BIOS updating (See Wu, Col. 3, lines 45-52).

The above clarifications have been included in the rejections.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Joseph D. Manoskey whose telephone number is (571)

272-3648. The examiner can normally be reached on Mon.-Fri. (7:30am to 4pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Robert Beausoliel can be reached on (571) 272-3645. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

March 16, 2007
JDM

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100